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Harald Michi

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EXAMINER

MANCHO, RONNIE M

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/767,087	Applicant(s) MICHIE ET AL.	
	Examiner RONNIE MANCHO	Art Unit 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-9 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-9 and 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remark

1. In the office action dated 6/22/07, PTOL-326 inadvertently indicated that the action was final. In an interview held on 12/12/07, the examiner indicated to the applicant's representative that the action of 6/22/07 was NOT a final rejection since it was a first action after filing of RCE dated 3/27/07.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-3, 6-9, 11-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In amended claim 1, the applicant recites “the loss of **a speed regulating function occurs solely** via a command of the driver to the input device”. The disclosure does not limit the invention with the terminology, “solely”. In fact, nowhere in the disclosure is recited the limitation, “**a speed regulating function occurs solely** via a command of the driver”.

This is new matter.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

Art Unit: 3663

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-3, 6-9, 11-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In claim 1, applicant recites, “a loss of a speed regulating-function”. It is not clear what all is meant and encompassed by the limitation, “*a loss* of a speed-regulating function”. The disclosure is not clear as to what should be considered “a loss”.

Applicant further recites “wherein the decision unit is configured to deactivate the speed controller when, in the second operating mode, the speed of the vehicle increases”. If the speed controller is deactivated, then how and in what manner does the speed of the vehicle increase? Applicant does not for an increase in speed after a speed controller has been deactivated.

In amended claim 1, the applicant recites, “the loss of **a speed regulating function occurs solely** via a command of the driver to the input device”. The limitation is in clear conflict with the following limitations, “wherein a first of the plurality of operating modes is an operating mode for a first predetermined vehicle speed range that is configured to be activated only above a limiting speed, and a second of the plurality of operating modes is for a second predetermined vehicle speed range that is lower than the first predetermined vehicle speed range, and wherein an upper limit of the second speed range is at least equal to the limiting speed, and wherein the second operating mode provides in certain instances an automatic braking of the vehicle to a standstill;

Art Unit: 3663

wherein the decision unit automatically causes a change from the first operating mode into the second operating mode when the speed of the vehicle decreases to below the limiting speed and then automatically limits the desired speed to a value permitted in the second operating mode;

wherein the decision unit deactivates the speed controller when, in the second operating mode, the speed of the vehicle increases, and the driver does not input a new desired speed, while the actual speed of the vehicle lies within a predefined speed range”. These limitations are performed automatically which are in conflict with the first limitation, “solely via a command of the driver”.

The rejection also applies to “activated *only* above a limiting speed”

The applicant further claims “a first predetermined vehicle speed range”, “a second predetermined vehicle speed range”. The claimed speed ranges are indefinite. There are no definite bounds that differentiate the speed ranges as claimed. Applicant’s specification, page 2, lines 1-3 recite, “a certain limiting speed, such as above 30 km/h”. Then lines 31-33 recite, “an upper limiting speed, such as up to 40 km/h. It is clearly seen that the speed ranges overlap and there is no clear distinction between the ranges.

Thus the limitation “a second predetermined speed vehicle speed range that is lower than the first predetermined vehicle speed range” is not enabled since the ranges overlap and there is no clear distinction between the claimed speed ranges.

In addition, the limitation, “wherein an upper limit of the second speed range is at least equal to the limiting speed” is not enabled. That is as disclosed in applicant’s specification, the

Art Unit: 3663

“upper limit of the second speed range” is 40 km/hr. Then the limiting speed is 30 km/h. Surely, 40 km/h is not equal to 30 km/h.

The rest of the claims are rejected for depending on a rejected base claim.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-3, 6-9, 11-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In amended claim 1, the applicant recites, “the loss of **a speed regulating function occurs solely** via a command of the driver to the input device”. The limitation is in clear conflict with the following limitations, “wherein a first of the plurality of operating modes is an operating mode for a first predetermined vehicle speed range that is configured to be activated only above a limiting speed, and a second of the plurality of operating modes is for a second predetermined vehicle speed range that is lower than the first predetermined vehicle speed range, and wherein an upper limit of the second speed range is at least equal to the limiting speed, and wherein the second operating mode provides in certain instances an automatic braking of the vehicle to a standstill;

wherein the decision unit automatically causes a change from the first operating mode into the second operating mode when the speed of the vehicle decreases to below the limiting speed and then automatically limits the desired speed to a value permitted in the second operating mode;

Art Unit: 3663

wherein the decision unit deactivates the speed controller when, in the second operating mode, the speed of the vehicle increases, and the driver does not input a new desired speed, while the actual speed of the vehicle lies within a predefined speed range”. These limitations are performed automatically which are in conflict with the first limitation, “solely via a command of the driver”.

The rejection also applies to “activated *only* above a limiting speed”

The applicant further claims “a first predetermined vehicle speed range”, “a second predetermined vehicle speed range”. The claimed speed ranges are indefinite. There are no definite bounds that differentiate the speed ranges as claimed. Applicant’s specification, page 2, lines 1-3 recite, “a certain limiting speed, such as above 30 km/h”. Then lines 31-33 recite, “an upper limiting speed, such as up to 40 km/h. It is clearly seen that the speed ranges overlap and there is no clear distinction between the ranges.

Thus the limitation “a second predetermined speed vehicle speed range that is lower than the first predetermined vehicle speed range” is not enabled since the ranges overlap and there is no clear distinction between the claimed speed ranges.

In addition, the limitation, “wherein an upper limit of the second speed range is at least equal to the limiting speed” is not enabled. That is as disclosed in applicant’s specification, the “upper limit of the second speed range” is 40 km/hr. Then the limiting speed is 30 km/h. Surely, 40 km/h is not equal to 30 km/h.

The claim does not clearly set forth the metes and bounds of the patent protection desired. The limitations in the claims are thus not clear as the limitations appear to be a direct translation from a foreign language.

Art Unit: 3663

The rest of the claims are rejected for depending on a rejected base claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. AS BEST UNDERSTOOD, Claims 1-3, 6-9, 11-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Hirasago (6658344).

Regarding claim 1, Hirasago (abstract, cols. 2, 4-7; figs. 1-31) discloses a speed controller for a motor vehicle comprising:

an input device configured to receive input of a desired speed by a driver (see inputs as in figs. 1-31), the input device having a plurality of operating modes (figs. 6 A-C; fig. 31) differing in functional scope, which operating modes are configured to be activated in different speed ranges, each operating mode having a corresponding number of speed regulating functions,

Art Unit: 3663

wherein a change in a current operating mode which results in the loss of a speed regulating function occurs solely via a command of the driver (cols. 2&3) to the input device; and

a decision unit configured to determine, using predefined criteria, whether a change in the desired speed input by the driver is to be interpreted as a command for changing the current operating mode (see controller; cols. 2, 4-7);

wherein a first of the plurality of operating modes is an operating mode for a first predetermined vehicle speed range that is configured to be activated only above a limiting speed, and a second of the plurality of operating modes is configured for a second predetermined vehicle speed range that is lower than the first predetermined vehicle speed range, and wherein an upper limit of the second speed range is at least equal to the limiting speed, and wherein the second operating mode provides in certain instances an automatic braking of the vehicle to a standstill (cols. 2, 4-7);

wherein the decision unit is configured to automatically cause a change from the first operating mode into the second operating mode when the speed of the vehicle decreases to below the limiting speed and then automatically limit the desired speed to a value permitted in the second operating mode (this limitation is interpreted to mean that one of the driving modes in the prior art is switched to the other, wherein the speed in one mode is lower than the speed in another mode; cols. 2, 4-7);

wherein the decision unit is configured to deactivate the speed controller when, in the second operating mode, the speed of the vehicle increases, and the driver does not input a new desired speed, while the actual speed of the vehicle lies within a predefined speed range (cols. 2, 4-7).

Art Unit: 3663

The limitation, “a change in a current operating mode which results in the loss of a speed regulating function occurs solely via a command of the driver” is interpreted as switching between the different modes disclosed in the prior art figs. 6A, 6B, 6C, wherein each of the modes have a different speed at which it operates (col. 2, 4-7). Wherein switching from one mode to the other is done only by command of the driver and not against the driver’s intension.

Regarding claim 2, Hirasago (abstract, cols. 2, 4-7; figs. 1-31) discloses the speed controller of claim 1, further comprising a display device adapted to display the current operating mode.

Regarding claim 3, Hirasago (abstract, cols. 2, 4-7; figs. 1-31) discloses the speed controller of claim 1, further comprising a signal device to signal to the driver a change in the current operating mode.

Regarding claim 6, Hirasago (abstract, cols. 2, 4-7; figs. 1-31) discloses the speed controller of claim 1, wherein the decision unit automatically causes a change from the first operating mode into the second operating mode when the desired speed is lower than the limiting speed V_s and when the actual speed of the vehicle is less than $V_s + h_1$, where h_1 has a non-negative value.

Regarding claim 7, Hirasago (abstract, cols. 2, 4-7; figs. 1-31) discloses the speed controller of claim 1, wherein the decision unit automatically causes the change from the first operating mode into the second operating mode when one of the following occur:

a) the desired speed is increased to a threshold value which is at least equal to the limiting speed; and

b) the actual speed of the vehicle does not increase to the limiting speed within a predefined time interval.

Regarding claim 8, Hirasago (abstract, cols. 2, 4-7; figs. 1-31) discloses the speed controller of claim 1, wherein the decision unit automatically causes the change from the second operating mode into the first operating mode when the desired speed is increased by the driver to a value that is greater than $V_s + h_1$, V_s being the limiting speed and h_1 having a non-negative value.

Regarding claim 9, Hirasago (abstract, cols. 2, 4-7; figs. 1-31) discloses the speed controller of claim 1, wherein the decision unit deactivates the speed controller when, in the second operating mode, the desired speed is less than or equal to the limiting speed V_s and the actual speed is greater than a threshold value $V_s + h_2$, where h_2 has a non-negative value.

Regarding claim 11, Hirasago (abstract, cols. 2, 4-7; figs. 1-31) discloses the speed controller of claim 1, wherein the decision unit activates the speed controller in the first operating mode when, upon the input of the desired speed, the actual speed of the vehicle is greater than the limiting speed and the decision unit activates the speed controller in the second operating mode and limits the desired speed when, upon the input of the desired speed, the actual speed of the vehicle is less than or equal to the limiting speed.

Regarding claim 12, Hirasago (abstract, cols. 2, 4-7; figs. 1-31) discloses the speed controller of claim 11, wherein the decision unit activates the speed controller in the second operating mode only when a target object is located by a distance sensor system and the distance from the vehicle to this target object lies within a predefined range.

Art Unit: 3663

Regarding claim 13, Hirasago (abstract, cols. 2, 4-7; figs. 1-31) discloses the speed controller of claim 12, wherein the decision unit automatically deactivates the speed controller in the second operating mode when the target object is not detected lost and is not re-detected within a predefined time span.

Regarding claim 14, Hirasago (abstract, cols. 2, 4-7; figs. 1-31) discloses the speed controller of claim 12, wherein the decision unit automatically deactivates the speed controller in the second operating mode when the distance between the vehicle and the target object becomes greater than a predefined value.

Response to Arguments

10. Applicant's arguments filed 17/17/07 have been fully considered but they are all not persuasive.

11. The rejections drawn to MPEP 2114/2115 have been withdrawn in view of applicant's amendments.

Applicant's argument drawn to the limitation, "the loss of **a speed regulating function occurs solely** via a command of the driver to the input device" is not convincing. The disclosure does not limit the invention with the terminology, "solely" in connection with a speed regulating function. Although the original claim 1 recites "solely", the term was recited in connection with a safety function as in the limitation, "the *loss of a safety-relevant function* occurring solely via a command of the driver". Thus the two limitations are quite different from each other. Nowhere in the disclosure is recited the limitation, "**a speed regulating function occurs solely** via a command of the driver". This is new matter. As seen instead in applicant's disclosure (page 8,

Art Unit: 3663

lines 5-7; page 10, line 26 to page 11, line 4) the driver operates units in a vehicle to switch from the S&R mode to ACC mode and vice versa. There is no indication of a speed regulating function being lossed. The disclosure instead indicates that there is *no loss* of a speed regulating function because the speed of the vehicle is regulated in different speed modes as recited in the first four lines of claim 1.

It is not clear what all is meant and encompassed by the limitation, “*a loss* of a speed-regulating function” as claimed. The disclosure is not clear as to what should be considered “a loss”. Applicant’s contention that “a speed regulating function that exists in the old operating mode (before the change) does not exist in the new operating mode” is not convincing because applicant does not show how the claimed speed regulating function is connected or related to any one of the operating modes (ACC mode or S&R mode). There is no loss in a speed regulating function because the driver can switch from one mode to the other. If switching from ACC to S&R mode and there is a loss of the ACC mode, then it will be impossible for the driver to switch back to the ACC mode from the S&R mode since the ACC mode had been lossed when the ACC mode was switched to the S&R mode. As already pointed out, page 10, line 26 to page 11 permits switching between modes without any loss.

Applicant’s examples such “the decision unit...automatically limits the desired speed”; “a change from a first operating mode to a second operating mode”, “the second operating mode provides.....an automatic braking of the vehicle to a standstill” , etc all indicate that a speed regulating function is active NOT lossed as argued by the applicant.

Applicant’s argument with respect to speed ranges is not convincing because the speed ranges are not clearly defined. They actually overlap as pointed out in the 112 rejections above

Art Unit: 3663

and as shown in fig. 2 of applicant's drawing. Had applicant instead recited "a first predetermined vehicle speed" and "a second predetermined vehicle speed" it would eliminated the claimed speed ranges and therefore the rejection. Ranges have clearly defined meets and bounds, which applicant does not recite in the claims.

Applicant's argument drawn to the prior art not disclosing multiple operating modes distinguished with regard to scope, number of speed-regulating functions, etc is not convincing. Applicant's invention is replete with 112 issues. Most of the limitations are not supported or clearly disclosed in the specification.

The prior art (as best understood) discloses an input device to receive input of a desired speed by a driver (see inputs as in figs. 1-31), the input device having a plurality of operating modes (figs. 6 A-C; fig. 31) differing in functional scope, which operating modes are configured to be activated in different speed ranges, each operating mode having a corresponding number of speed regulating functions, wherein a change in a current operating mode which results in the loss of a speed regulating function occurs solely via a command of the driver (cols. 2&3) to the input device; and

a decision unit to determine, using predefined criteria, whether a change in the desired speed input by the driver is to be interpreted as a command for changing the current operating mode (controller; cols. 2, 4-7);

wherein a first of the plurality of operating modes is an operating mode for a first predetermined vehicle speed range that is configured to be activated only above a limiting speed, and a second of the plurality of operating modes is for a second predetermined vehicle speed range that is lower than the first predetermined vehicle speed range, and wherein an upper limit

Art Unit: 3663

of the second speed range is at least equal to the limiting speed, and wherein the second operating mode provides in certain instances an automatic braking of the vehicle to a standstill;

wherein the decision unit automatically causes a change from the first operating mode into the second operating mode when the speed of the vehicle decreases to below the limiting speed and then automatically limits the desired speed to a value permitted in the second operating mode.

wherein the decision unit deactivates the speed controller when, in the second operating mode, the speed of the vehicle increases, and the driver does not input a new desired speed, while the actual speed of the vehicle lies within a predefined speed range.

The limitation, “a change in a current operating mode which results in the loss of a speed regulating function occurs solely via a command of the driver” is interpreted as switching between the different modes disclosed in the prior art figs. 6A, 6B, 6C, wherein each of the modes have a different speed at which it operates (col. 2, 4-7). Wherein switching from one mode to the other is done only by command of the driver and not against the driver’s intension.

It is believed that the prior art anticipates the claims. The rejections thus stand.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

Art Unit: 3663

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Communication

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronnie Mancho whose telephone number is 571-272-6984. The examiner can normally be reached on Mon-Thurs: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/767,087
Art Unit: 3663

Page 16

Ronnie Mancho
Examiner
Art Unit 3663

3/28/2008

/Jack W. Keith/
Supervisory Patent Examiner, Art Unit 3663